CLAIMS:

1. Method for operating a discharge lamp (11) including two electrodes (12,13), said method comprising applying to said electrodes (12,13) an alternating current (I_{Lamp}), which alternating current (I_{Lamp}) has a direct current component (DC) for compensating a temperature difference between said two electrodes (12,13), wherein said direct current component (DC) is selected such that a first one of said electrodes (12,13), which is expected to have a lower temperature than the second one of said electrodes (13,12), functions as anode for said direct current component (DC), while said second electrode (13,12) functions as cathode for said direct current component (DC).

2. Method according to claim 1, wherein said direct current component (DC) constitutes 0.1% to 50% of the total current (I_{Lamp}).

3. Method according to claim 1 or 2, wherein said direct current component (DC) is obtained by superimposing a direct current to an alternating lamp current.

4. Method according to one of the preceding claims, wherein said direct current component (DC) is obtained by providing a different current strength in both directions of the alternating current (I_{Lamp}).

5. Method according to one of the preceding claims, wherein said direct current component (DC) is obtained by providing to said discharge lamp (11) an alternating current with a duty cycle of which the half cycles (I) with a positive current have a different length than the half cycles (II) with a negative current.

6. Method according to one of the preceding claims, wherein said direct current component (DC) is obtained by supplying one or more additional current pulses (P1,P2) to each half cycle (I,II) of the duty cycle of said alternating current, and wherein the energy content of said additional current pulses (P1,P2) is controlled in a way that it is larger in one of said half cycles (I,II) than in the other.

7. Method according to one of the preceding claims, wherein said direct current component (DC) is determined according to a temperature difference expected between said electrodes (12,13) due to a non-horizontal burning position of said discharge lamp (11).

8. Method according to one of the preceding claims, wherein said direct current component (DC) is determined according to a temperature difference expected between said electrodes (12,13) due to an unequal cooling of said electrodes (12,13).

9. Method according to one of the preceding claims, wherein said direct current component (DC) is predetermined for the entire time of operation of said discharge lamp (11).

10. Method according to one of claims 1 to 8, wherein said direct current component (DC) is adjusted during the operation of said discharge lamp (11) based on measurements indicative of an expected temperature difference between said electrodes (12,13).

11. Method according to claim 10, wherein for said measurements, the voltage (U_{Lamp}) over said discharge lamp (11) is measured at least twice during a respective half cycle (I,II) of the duty cycle of an alternating current (I_{Lamp}) supplied to said discharge lamp (11), and wherein a detected increasing voltage during one half cycle (I,II) is taken as indication that the electrode (12,13) acting as a cathode in this half cycle (I,II) is hot enough, while a decreasing voltage or a sudden drop of voltage

during one half cycle (I,II) is taken as indication that the electrode (12,13) acting as a cathode in this half cycle (I,II) is too cold.

12. Method according to claim 10 to 11, wherein said direct current component (DC) is adjusted during the operation of said discharge lamp (11) in a control loop, in which control loop the value of said direct current component (DC) is respectively adapted to provide more anodic current to an electrode (12,13) which was determined to be too cold and to have a lower temperature than said other electrode (13,12).

13. Method according to one of claims 10 to 12, wherein said direct current component (DC) is adjusted during the operation of said discharge lamp (11) in a control loop, in which control loop the value of said direct current component (DC) is decreased, in case both of said electrodes (12,13) were determined to be hot enough.

14. Method according to one of claims 10 to 13, wherein the total power provided to said discharge lamp (11) is increased, in case both of said electrodes (12,13) are determined to be too cold.

15. Method according to one of claims 10 to 14, wherein the total power provided to said discharge lamp (11) is decreased, in case both of said electrodes (12,13) are determined to be hot enough.

16. Method according to one of claims 10 to 15, wherein information on the carried out adjustments of the direct current component (DC) is recorded in a non-volatile memory for supporting future adjustments of a direct current component (DC).

17. Electronic circuit (14,15,16) for operating a discharge lamp (11) with two electrodes (12,13), which electronic circuit (14,15,16) comprises means for realizing the method according to one of claims 1 to 16.

18. Software program for operating a discharge lamp (11) with two electrodes (12,13), which software program comprises a software code realizing the method according to one of claims 1 to 16 when run in processing means (15) of a driver (14,15,16) controlling the power supply to said discharge lamp (11).

19. Lighting system comprising a discharge lamp (11) with two electrodes (12,13) and means for realizing the method according to one of claims 1 to 16.

20. Lighting system according to claim 19, which enables different burning positions for said discharge lamp (11).

21. Lighting system according to claim 19 or 20, in which system said discharge lamp (11) is arranged such that one of said electrodes (12,13) is cooled more than the other one of said electrodes (12,13) during the operation of said lighting system.

22. Lighting system according to one of claims 19 to 21, which system is a projection system.